Medical
Water

CONTENTS

No. 1, September 20, 1946

PAGE

Granick, S., and Gilder, H. The porphyrin requirements of *Haemophilus influenzae* and some functions of the vinyl and propionic acid side chains of heme 1

Ponder, Eric. Hemolytic systems containing anionic detergents 15

Krueger, A. P., Scribner, E. J., and Brown, B. B. Further observations on the mechanism of phage action 25

Wald, George, and Allen, Gordon. Fractionation of the eye pigments of *Drosophila melanogaster* 41

Osterhout, W. J. V. Nature of the action current in *Nitella*. VI. Simple and complex action patterns 47

Eppright, Margaret A., and Williams, Roger J. Effects of certain limiting conditions on the synthesis of B vitamins by yeast 61

Goldinger, James M., and Barron, E. S. Guzman. The pyruvate metabolism of sea urchin eggs during the process of cell division 73

No. 2, November 20, 1946

Pickels, Edward G., and Anderson, Rubert S. Molecular association of hemocyanin produced by x-rays as observed in the ultracentrifuge .. 83

Pollister, A. W., and Mirsky, A. E. The nucleoprotamine of trout sperm. Plates 1 and 2 101

Mirsky, A. E., and Pollister, A. W. Chromosin, a desoxyribose nucleoprotein complex of the cell nucleus. Plate 3 117

Christensen, L. R. The activation of plasminogen by chloroform 149

Mysels, Karol J. Studies of aluminum soaps. IX. Electron microscope view of lyophilized aluminum laurate 159

Von Brand, Theodor, Johnson, Eleanor M., and Rees, Charles W. Observations on the respiration of *Trypanosoma cruzi* in culture 163

Northrop, John H. Crystallization of pepsin from alcohol 177

Herriott, Roger M., Anson, M. L., and Northrop, John H. Reaction of enzymes and proteins with mustard gas (bis(β-chloroethyl)sulfide) .. 185

No. 3, January 20, 1947

Ford, Joan Munro. Saltant production by wave lengths of visible and long ultraviolet monochromatic irradiation, and a comparison with saltants produced by short wave lengths of monochromatic ultraviolet irradiation in the fungus *Chaetomium globosum*. Plates 4 and 5 211

Myers, Jack. Oxidative assimilation in relation to photosynthesis in *Chlorella* 217

PAGE

OSTERHOUT, W. J. V. Some properties of protoplasmic gels. II. Contraction of chloroplasts in currents of water entering the cell and expansion in outgoing currents 229
PONDER, ERIC. The prolytic loss of K from human red cells 235
DETHIER, V. G., and CHADWICK, L. E. Rejection thresholds of the blowfly for a series of aliphatic alcohols 247
CHADWICK, L. E., and DETHIER, V. G. The relationship between chemical structure and the response of blowflies to tarsal stimulation by aliphatic acids 255
FISHER, KENNETH C., and ARMSTRONG, FLORENCE H. The effects of sulfathiazole and of propyl carbamate on the rate of oxygen consumption and growth in *Escherichia coli* 263
ARMSTRONG, FLORENCE H., and FISHER, KENNETH C. The oxygen consumption associated with growth in *Escherichia coli* and the effect of sulfathiazole and of *n*-propyl carbamate on it 279

No. 4, MARCH 20, 1947

KUNITZ, M. Crystalline soy bean trypsin inhibitor. II. General properties 291
KUNITZ, M. Isolation of a crystalline protein compound of trypsin and of soy bean trypsin inhibitor 311
CHANG, M. C. The effects of serum on spermatozoa 321
BERNHEIMER, ALAN W. Comparative kinetics of hemolysis induced by bacterial and other hemolysins 337
REINER, JOHN M. Metabolic intermediates in adaptive fermentation of galactose by yeast 355
REINER, JOHN M. The kinetics of multiple enzyme inhibition 367

No. 5, MAY 20, 1947

NORTHROP, JOHN H. Action of papain and ficin on tadpoles and *Arbacia* eggs 375
NORTHROP, JOHN H. Plastein from pepsin and trypsin 377
PONDER, ERIC. K-Na exchange accompanying the prolytic loss of K from human red cells 379
HÖBER, RUDOLF. Studies on the physiological effects of non-polar–polar organic electrolytes. I. The influence upon the resting potential of frog muscle 389
ECKER, PAUL GERARD. The ultracentrifuge study of plastein 399
MOMMAERTS, W. F. H. M., and SERAIDARIAN, KRIKOR. A study of the adenosine triphosphatase activity of myosin and actomyosin 401

PAGE

CHAPANIS, A. The dark adaptation of the color anomalous measured with lights of different hues 423

OSTERHOUT, W. J. V. Some aspects of secretion. I. Secretion of water 439

No. 6, JULY 20, 1947

HERRIOTT, ROGER M. Solubility of mustard gas [bis(β-chloroethyl)sulfide] in water, molar sodium chloride, and in solutions of detergents 449

HERRIOTT, ROGER M. The sulfonium salt of mustard gas: bis-β-[bis(β-hydroxyethyl)sulfonium]ethylsulfide dichloride (H·2TDG) 457

CHRISTENSEN, L. R. Protamine purification of streptokinase and effect of pH and temperature on reversible inactivation 465

NORTHROP, JOHN H. Detection of mustard gas (H), lewisite (L), ethyldichlorarsine (ED), and phenyldichlorarsine (PD) with trained dogs or rats 475

PONDER, ERIC. Prolytic ion exchanges produced in human red cells by methanol, ethanol, guaiacol, and resorcinol 479

GRAHAM, HELEN TREDWAY, and BLAIR, H. A. The effect of environmental potassium and calcium concentrations on the recovery of the action potential and related functions of nerve 493

INDEX TO VOLUME 30 519